

Designing a self-produced electronic generator to develop digital learning objects regarding the needs and levels of teachers' relevant educational and technological knowledge and skills.

Learning objects are designed and developed to enhance the educational content. They can be used to promote the teaching and learning processes and achieve intended learning outcomes. Teachers, as subject matter experts, are considered the best experts to design and develop such learning objects. Thus, developing an easy-to-use mechanism to design and produce learning objects by teachers in a manner that does not conflict with their capabilities, knowledge, and limited skills in this field, will help teachers achieve that goal. The current study sought to investigate the perceptions of Omani teachers regarding the need to use an e-learning generator to produce learning objects for their students without the need to possess high technical skills. Based on the literature, a survey of 120 teachers from various schools in Muscat was conducted to determine their perceptions of four aspects: (1) the need for using learning objects in teaching and learning, (2) teachers' knowledge of designing and producing learning objects (3) teachers' skills of designing and producing learning objects, and (4) the need for designing a platform to help teachers easily produce learning objects. According to the findings, most teachers (76.08%) believe that learning objects are needed in teaching and learning. However, they reported very low knowledge and skills about designing and producing learning objects. Finally, most teachers (79.59%) expressed their need to have a platform to help them design and produce e-learning objects. Based on the findings, the study proposed to develop an eLearning generator to be used in Omani schools.